

Transforming Cannabis Cultivation in Northern Morocco: A Geographical Analysis from Prohibition to Legitimization

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This article explores the traditional cultivation of kif in Northern Morocco, with a specific focus on the historically significant regions of Ketama, Beni Sedath, and Beni Khalid. Recently, this topic has garnered substantial controversy and drawn attention from both national and international public opinion and political spheres. Initially, the paper delves into the early history and geographical expansion of kif cultivation in Morocco. Subsequently, it presents a comprehensive review of key legislation governing this crop. Finally, the paper provides insights into the perspectives of local farmers regarding the new laws impacting kif cultivation. This multifaceted approach offers a thorough understanding of the cultural, legal, and social dimensions of kif cultivation in Northern Morocco.

Keywords: Cannabis -legalization - rural mountains - historical areas - land development - legitimate uses.

INTRODUCTION

Morocco, like several countries in the Americas, Asia, and Africa, has a long history of cultivating kif, a tradition dating back to ancient times. Initially, the kif plant was primarily valued for its fibers, used in making textiles, ropes, burlap sacks, and for medical applications. However, its role has evolved over time. While historically cultivated for its fibers, kif's current prominence is largely due to its narcotic uses. Despite a ban policy by Moroccan authorities, the area of land cultivated with kif remains significant globally. In response to international laws on cannabis legalization, Morocco has enacted a regulatory law for the legitimate uses of cannabis. This study delves into the future of kif cultivation in Morocco's northern regions in light of this new legislation. It explores farmers' perspectives on this law and assesses whether this initiative can effectively reduce smuggling and illegal agriculture.

Importance of the topic: The significance of this study lies in examining the impact of legalizing kif cultivation on critical issues such as smuggling and migration. It highlights the potential of kif's industrial uses to benefit local farmers and contribute positively to the Moroccan economy. This research aims to provide a comprehensive understanding of these

implications, underscoring the importance of kif legalization in the broader socio-economic context of Morocco.

Study methodology: This study utilizes a mixed-method research approach, integrating inductive and deductive reasoning. The inductive aspect involves a thorough review of existing literature and sources related to kif cultivation. Deductive reasoning is applied to draw conclusions from the reviewed material. Additionally, the research employs historical and legal analyses to chronologically track the development of kif cultivation and to examine the key legislations governing it. This comprehensive approach aims to effectively meet the study's objectives, yielding valuable findings and actionable recommendations.

The historical context for the beginning of the cultivation of the cannabis: The oldest manuscript of the Al-Kif plant in Europe dates back to the first century AD, which is in the British Museum. This drawing was later accompanied by comments in Arabic (Marine, 2014). What is the date when this plant was introduced to Morocco?

The history of kif cultivation in Morocco: Some sources confirmed that the kif plant was present in Morocco during the eighteenth century, when it was grown in Ketama and in the regions of Souss and Marrakesh (Raynaud, 1902).

And in the nineteenth century, when "Ketama was famous for the production of kif, and it was sold in all the markets of the tribe" (Auguste, 1899). Without indicating the date of entry of this plant. There are sources that dated the period in which it entered Morocco, some identified it in the seventh century AD (Maurer, 1968). Which came with the arrivals of the Arabs to Morocco (Labrousse and Romero, 2001).

Others asserted that his entry into Morocco dated from the 13th century (Kenza, 2015). Perhaps the most complete source on the cultivation of kif in Morocco during the fourteenth century is the description of Africa by Jean Léon African, where he indicated that "cannabis was grown in Maghila near Meknes, **Ouzgan** and Sefrou" (Jean, 1896).

Some of them mention in the fifteenth century, when the Saadians worked to prohibit it during this period (Khalid, 2018), and it was publicly burned in the weekly markets (M'hamed, 1985).

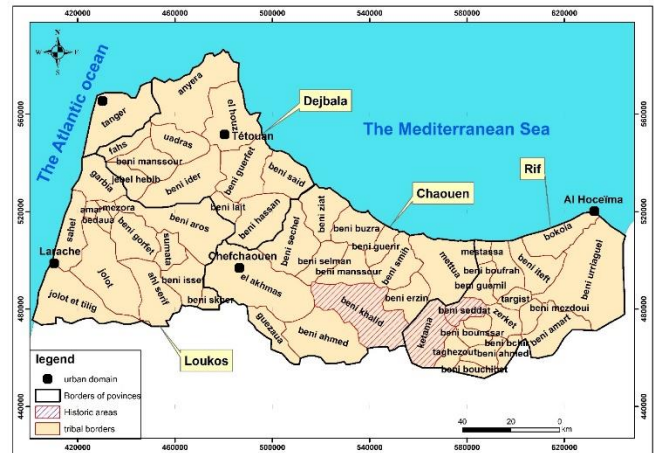
As for the source of the kif plant, it may be from India or some Asian countries by virtue of the fact that countries known for their control of the seas, such as Spain, Portugal, the Netherlands and England, used to practice extensive trade between Asia and the Mediterranean countries, including Morocco. It is possible that the method of smoking it in its traditional form was also imported from India or some South American countries, through Spanish or Portuguese sailors. In general, this legacy (the kif plant) can be considered an imposed historical fact that infiltrated the soil of our country, and was encouraged by the colonial countries. What are the historical areas for cultivation of kif? How did this plant expand in northern Morocco?

Spatial expansions of kif cultivation in northern Morocco: Morocco has known a set of events and facts in northern Morocco, which directly affected the expansion of the areas cultivated with this plant. This is in addition to the population increase, the scarcity of agricultural land, and the difficult natural conditions that drive the population to search for other resources to live. Faced with this situation, many tribes in the Rif Mountains found in the cultivation of kif a solution to improve their economic and social level.

Historical areas of kif cultivation in northern Morocco: The last decades of the nineteenth century were known as a period of weakness of the central authority, which made Sultan Moulay Hassan I agree in 1890 to allow kif cultivation in the Rif Mountains, and allowed five douar of the Ketama and Beni Sedath tribes to practice it, including: two douars from the Ketama tribe (douar Beni Issa) in community Abd-alghaya Sawahel and (Griha) in the Ketama community (Maurer, 1968). Then, during the colonial period, Franco authorized the cultivation of kif in Ketama and some of their neighbors (Grigori, 2012).

This cultivation flourished in the Spanish protection zone during the period that was banned in the French protection zone under the International Convention on Narcotic Drugs to which Morocco is committed. The main reason for the

continuation of this cultivation is due to Spain's refusal to sign this agreement. However, production was restricted to three tribes: "Ketama, Beni Sedath and Beni Khalid" (Maurer, 1968).



Source: GERARD Maurer, 1968

Figure 1. Historical areas for kif cultivation in the central countryside licensed by Sultan Hassan I in 1890.

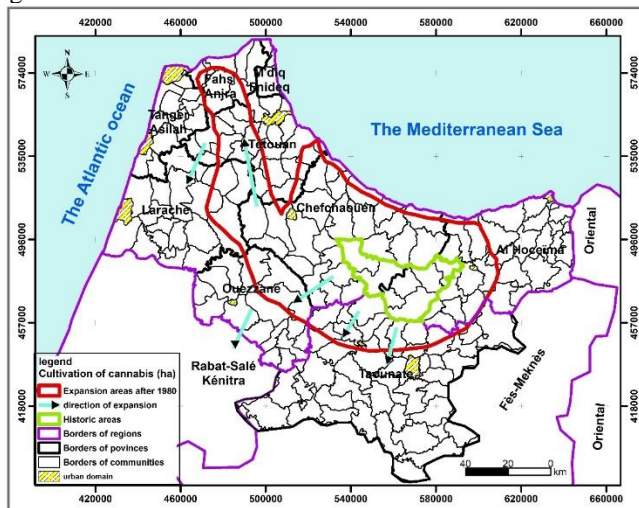
The regions known historically for this cultivation in northern Morocco are: The tribes: Ketama and Beni Sadath, which belong to the union of the Sanhaja Sarair tribes (Al Hoceima province) and the Beni Khalid tribe belonging to the Ghamara tribal group (Chefchaouen province). This settlement of kif cultivation is explained by the combination of several factors: the most important of which are the difficult characteristics of the region (poor soil, steep slope, lack of agricultural land...), then the weakness of the central authority that authorized the tribes concerned with this cultivation, and the encouragement of the Spanish colonizer to the local population to cultivate it for the sake of calm the protests in the region.

However, these historical regions did not rely primarily on cannabis in their economy, as subsistence cultivation was more important than cannabis cultivation (M'hamed, 1985). However, after Morocco gained its independence, kif cultivation became the backbone of the rural economy in these areas, and was able to have a strong impact on the income of farmers, which contributed to moving the economic cycle of the residents of the region and the various segments of society that come from outside the region. On the other hand, this situation led to the expansion of this agriculture in the direction of new areas.

Areas covered by kif cultivation in northern Morocco: The cultivation of kif in northern Morocco was known to a wide extent that included new regions, and this rapid spread coincided with the high demand for this product in the European market, especially after the extraction of the substance (hachich) from the kif plant, which, thanks to its high revenues, was able to improve the living conditions of



the population, so what are the regions New covered by this agriculture?



Source: (Labrousse and Romero, 2001) Rapport sur la situation du cannabis.

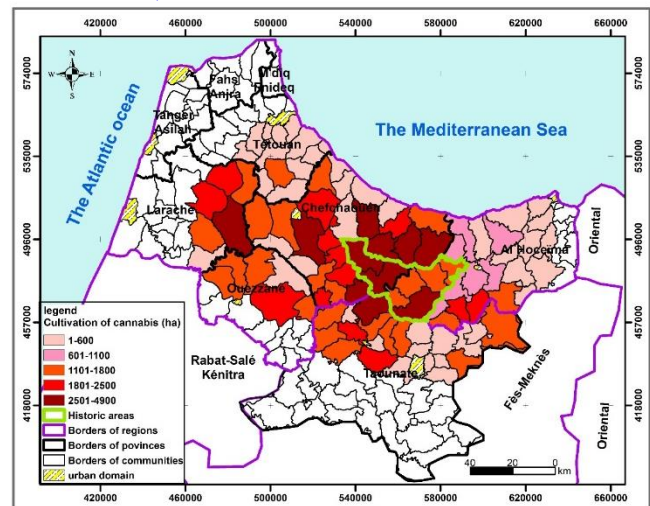
Figure 2. Spatial expansion of kif cultivation in northern Morocco after 1980.

With the beginning of the sixties of the twentieth century, the generation of hippies raised the slogan of legalizing the consumption of kif, led by American and British rock stars and other bands. These waves contributed to raising attention to Morocco, especially the Ketama region, which has become a destination for those wishing to consume kif.

During this period, the peasants began to look at the cultivation of the kif as an opportunity to raise their income, so this agriculture gradually expanded in the region, and extended to new, modern areas in order to meet the European demand (Kenza, 2015).

At the beginning of the eighties, the kif area ranged between 5 000 and 10 000 hectares, and it moved to between 30 000 and 35 000 hectares at the end of the same decade (Labrousse and Romero, 2001). The area cultivated with kif in 1993,

according to the statistics of the Ministry of Agriculture, ranged between 64 000 and 74 000 hectares (Pasqual, 1997). In 1995, its area amounted to about 79 846 hectares, according to PAIDAR-MED data, which carried out a study on behalf of the European Union. In the year 2000, based on the data of the Moroccan Ministry of Agriculture, its area reached 90 000 hectares, to rise to 100 000 hectares in 2001 (Labrousse and Romero, 2001).



Source: Office des Nations unies contre la drogue et le crime. 2003: Enquête sur le cannabis au Maroc.

Figure 3. Spatial expansion of kif cultivation by communities in northern Morocco in 2003.

In 2003, the Moroccan government concluded a cooperation agreement with the United Nations Office for the Fight against Drugs and Crime in order to conduct research on kif production in Morocco. Among the results of that research were (ONUDD, 2003): The increase in the area cultivated with kif in northern Morocco, as it was estimated at about 134 000 hectares extending over five provinces, and the total number of family members that cultivated kif was about 800 000 people, while the production was estimated at about 47

Table 1. The evolution of the area cultivated with kif in northern Morocco during the period between 1993 and 2013.

	The area cultivated with kif in hectares						
	1993 A	1995 B	2000 C	2001 D	2003 E	2004 E	2013 F
Al Hoceima	32000	-	37650	-	22831	10524	11671
Chefchaouen	18000	-	35760	-	66699	75195	40529
Larache	20000	-	11750	-	11966	14718	0
Taounate	-	-	4840	-	25720	11892	12362
Tetouan	-	-	-	-	6889	8225	7916
Total	70000	79846	90000	100000	134105	120554	72500
Percentage of increase or decline	-	9846+	10154+	10000+	34105+	-13551	-48054
							-24000

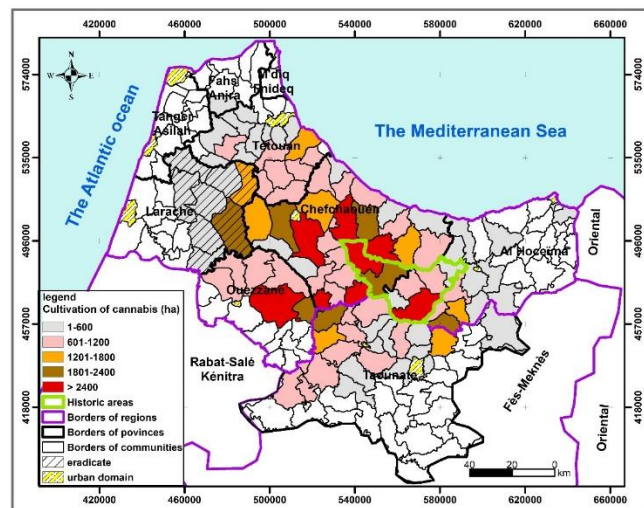
Source: A : OGD. – B : PAIDAR-MED. – C : OGD. – D : - (Labrousse and Romero, 2001) – E: Office des Nations unies contre la drogue et le crime. 2003, 2004 et 2005. Enquête sur le cannabis au Maroc. – F: ONUDD 2013;



000 tons. The Chefchaouen province occupied 50% of the total area cultivated with kif in the five provinces, followed by the Taounate province with 19%, Al Hoceima with 17%, then Larache with 9%, and finally Tetouan with 5%.

These figures show that the area of land cultivated with kif has expanded significantly compared to 2001, as it moved from 100 000 hectares to 134 000 hectares, an increase of 34 000 hectares in two years.

3.4



Source: Office des Nations unies contre la drogue et le crime 2005: Enquête sur le cannabis au Maroc. P. 6.

Figure 4. Spatial expansion of kif cultivation by communities in northern Morocco in 2005.

It is clear from the above map that the area of kif cultivation declined during the year 2005 compared to 2003, as it moved from 134,000 hectares to 72,500 hectares. For example, it is noted that the number of communes that used to cultivate kif in the province of Al Hoceima increased from 26 communes in 2003 to 17 communes in 2005. And from an area of 22831 hectares to 11671 hectares. This decline is explained by the pressures of the European Union countries on Morocco to combat this plant, and in order to combat this plant, Morocco has made great efforts, especially since the beginning of 2004, whether by burning crops, uprooting plants, or spraying them with toxic substances, as well as imprisoning a large number of farmers and drug dealers.

From the above data, it is noted that the area cultivated with kif in northern Morocco witnessed a remarkable increase between 1993 and 2003, as it moved from 70 000 thousand hectares to 134 105 thousand hectares, an increase of 64 106 thousand hectares in ten years. While this area witnessed a decline in the following years between 2003 and 2013, as it decreased by 63%, with a decline area of 85 605 thousand hectares.

If the reason for the decline of kif cultivation is mainly due to the state's restraining interventions, then the reason for the

expansion and survival of this cultivation in northern Morocco in general, and the historical regions in particular, is due to the weakness of the state's developmental interventions in these areas, in addition to the dominance of agricultural holdings with a small area and weak proportions of preserved lands.

Spatial expansions and their impact on the local kif plant:

Local kif seeds have maintained their presence for many decades in northern Morocco. However, in the late 1990s, new types of imported seeds were introduced, through global smuggling networks, such as "Pakistan, Mexican, and Khardala..." seeds. The cannabis plant Critical is one of the newest seeds that has invaded the field with record speed, thanks to its high yield.

In this context, in many countries, such as the Netherlands, Switzerland and Spain, there are dealers who specialize in hybrid seeds, and they have been awarded many prizes in competitions organized in the Netherlands, including: (Cannabis Cup) in Switzerland; cannatrade cup organized in 2000; the cannabiswiss cup; the spannabis cup in Spain; and the Expocannabis Cup in the United States (Marine, 2014).

It is worth noting that hybrid seeds imported from outside Morocco cause several problems in the region, including those related to the economic and social aspects, and others related to the environmental aspect. These seeds lead to soil poverty and water depletion. They also affect the local kif plant indirectly, meaning its gradual and definitive extinction from the region.

The historical context of the laws governing the cultivation of kif in Morocco:

Kif cultivation was known before the protection as a legal regulation by the sultans of Morocco. Sometimes they were licensed, and at other times they were banned and their crops burned. It should be noted that in the year 1795, Sultan Moulay Solaiman issued an order to cut down the kif crop, based on the rule of the Prophet's law, which forbids everything that intoxicates the mind. Sultan Moulay Hassan I, in turn, tried to eliminate the kif, by issuing a decree criminalizing the use of the kif plant and burning farms (Raynaud, 1902). But he also granted privileges to several tribes in the countryside to practice it (Fredrik & Ian, 2008).

What are the most important legislations issued to regulate the cultivation of kif in the twentieth century? What are the legislative developments at the beginning of the twenty-first century in this context?

The legislation regulating the cultivation of kif in Morocco during the twentieth century:

The cultivation of kif in our country did not know a recovery and development except during the era of the French protectorate in the south, and the Spanish in the north. And the superpowers had stipulated in the Algeiras Conference dated April 7, 1906 in (Chapter 72) that the cultivation and production of the kif material be monopolized by the state.



It should be noted that the monopoly of tobacco and kif by the Moroccan state constituted an annual revenue of between 10 and 12 million Peseta (Louis, 1905).

If we trace the legal texts issued in the field of kif cultivation in Morocco during the twentieth century, we find that it went through a series of stages: the legislator tried to find a legal framework to control kif cultivation in the beginning, before resorting to criminalizing and banning it completely in the end.

The laws and decrees issued in the 21st century regarding the regulation of kif cultivation in Morocco: Many countries, especially with the beginning of the 21st century, knew a new approach to regulating kif cultivation. For example, Canada implemented a medical cannabis program and passed legislation to allow the medical use of cannabis under specific conditions in 1999. Then, in this context, Israel followed (2001). and the Netherlands (2003), then other countries such as Switzerland (2011), the Czech Republic (2013), Australia (2016), Germany (2017) etc. (OEDT, 2018).

The year 2021 witnessed a qualitative leap after Morocco voted, along with 27 other countries, to remove “cannabis”

from the category of dangerous drugs, and after the final decision to delete cannabis from the fourth schedule attached to the United Nations Convention on Narcotic Drugs of 1961. Morocco got involved in the issue of legalizing this cultivation, and proceeded to issue Law No. 13.21 Concerning the Legal Uses of Cannabis (Decree No. 1.21.59, 2021).

This law was followed by a set of decrees and decisions, related to specifying the sales contract forms, the type of seeds, and declaring damages and losses..., what is the opinion of farmers about the new law related to the legal uses of cannabis?

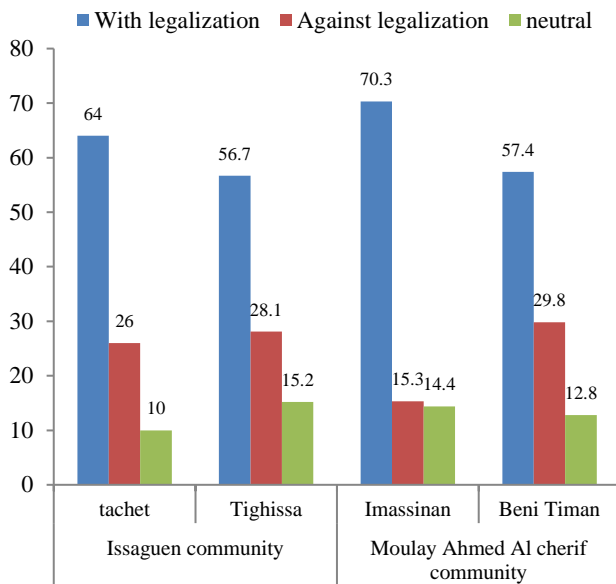
Farmers' opinion of the new law regarding the legal uses of hemp: Before talking about the opinion of farmers, we must point out in this regard that the country of Kif needs an integrated project to lift it out of poverty and marginalization, as poverty has been endemic in the region for many decades. It has worsened significantly in recent years to the point that most farmers have not fully cultivated their holdings (the case of the Issaguen and Moulay Ahmed Cherif communities).

Table 2. An inventory of the laws issued in the matter of kif cultivation in Morocco.

Legislative phases	Dahir - Decree - Law	Application field
The first phase:	Dahir of 05/04/1915 on the surveillance and repression of tobacco and kif smuggling	French occupation zone
	Decree of February 6, 1917 published in the Official Gazette of March 10, 1917 regulating the cultivation of kef.	Spanish occupation zone
The second phase:	Dahir of 9 Safar 1388 (3 November, 1919) regulating the cultivation of hemp in Kif	French occupation zone
Adjusting the cultivation of kif	Dahir of 12 Rebia II 1341 (2 December, 1922) relating to regulations on the importation, trade, possession and use of poisonous substances	The three regions
	Dahir of Safar 18, 1348 (25 July, 1929) instituting a tax on the sale price of tobacco and kif	The three regions
	Dahir of 1st Chaoual 1350 (8 February, 1932) approving an agreement between the Sherifian Government and the International Society for the Joint Management of Tobacco in Morocco	The three regions
	Decree of August 22, 1935 regarding limiting the territorial scope of the areas of kif cultivation and defining them in three regions: Ketama, Beni Sedath, and Beni Khaled.	Spanish occupation zone
	Dahir of 18 Joumada II 1359 (24 July, 1940) establishing an exceptional and temporary tax on the sale of tobacco and kif	French occupation zone
The third phase:	Dahir of 20 Chaabane 1373 (24 April, 1954) prohibiting hemp in Kif	French occupation zone
Preventing the cultivation of kif	Decree No. 2-56-038 of 20 kaada 1375 (30 June, 1956) allocating bonuses to agents responsible for repressing kif fraud	Morocco
The fourth phase:	Dahir No. 1-60-138 of 16 Joumada II 1380 (6 December, 1960) supplementing the Dahir of 20 Shaabane 1373 (24 April, 1954) prohibiting hemp in kif, with regard to its application to the former protectorate zone Spanish and the province of Tangier	Spanish occupation zone
Extending the Dahir 1954 applied in the French region to the rest of the Kingdom's regions after independence.		
The fifth phase:	Dahir carrying law n° 1-73-282 of 28 rebia II 1394 (May 21, 1974) relating to the repression of drug addiction and the prevention of drug addicts	Morocco
Rebuild drug addiction	Decree No. 2-77-626 of 19 Chaoual 1397 (October 3, 1977) creating a national narcotics commission	Morocco

Source: The Official Gazette of Morocco





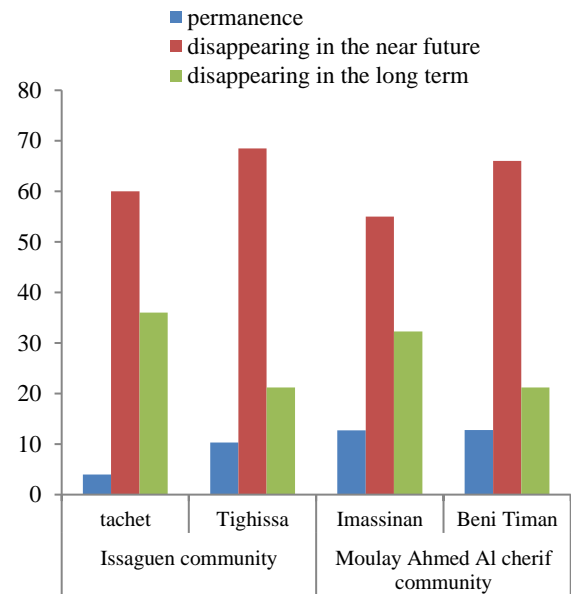
Source: Field research 2021

Figure 5. Farmers' opinion of legalizing the cultivation of cannabis.

From the graph above, it is clear that the opinion of the respondents regarding the legalization of kif cultivation differs between those who welcome this law and those who reject it, and the dominant opinion in this context remains the positive opinion of the new law, which reached 64.2%, which indicates that the majority The respondents support or welcome the legalization of kif, an opinion that remains conditional, as expressed by most of the respondents, not to expand the field of kif cultivation, and to limit it to areas known for practicing this cultivation. This percentage can also be explained by the residents' desire to carry out their activities in public and without fear.

As for what makes the percentage of 21.7% against legalization, this can be explained by not sharing their opinions and demands during the formulation of this project, which made them fear the future of this step. In fact, in their view, the matter is nothing more than fighting agriculture in another way. Will legalizing this cultivation really lead to reducing judicial prosecutions and preserving local seeds? Or will it only enable public authorities to extend their control over the production of this plant?

It is clear from the graph above that the majority of respondents declared that the fate of kif cultivation in the future is extinction, whether in the short or long term, as the percentage of these respondents reached 88.8%, while the percentage of respondents who considered that the fate of kif cultivation is permanent constituted a percentage Weak, not exceeding 11.2%.



Source: Field research 2021

Figure 6. The future fate of illegal kif cultivation in the belief of the residents of the region.

These results obtained through field research converge with the results of the Ministry of the Interior in its report on the current state of cannabis cultivation in Morocco, where 80% of kif production is threatened with disappearance due to the legalization of medical and recreational cannabis currently underway in Europe. This situation may result in great suffering for farmers in the Kif regions. In this context, the Ministry of Interior classified the suffering of farmers in its latest report into three sufferings:

First: They are economically exploited by smugglers. Second: They are forced to live in semi-anonymity and are unable to fully participate in social life. Third: Their natural surroundings are rapidly deteriorating.

The different uses of the cannabis plant: Hemp has been used for centuries to obtain textile fibers (UNODC, 2009). It was also used in the manufacture of medicines to treat some diseases in ancient Egyptian civilization (Russo, 2007). The use of hemp fibers in the manufacture of ropes and cloth was an important activity in France in the fifth century (Imane, 2019).

Uses of hemp fibers in construction: Some Moroccan students built a house out of hemp and equipped with solar panels, on the occasion of the tenth anniversary of solar energy in Africa in 2019. The goal of the competition was to encourage students to design environmentally sustainable and affordable homes.

Within the framework of these alternative uses for Indian hemp, Monika Brümmer, a German architect and international expert in building with Indian hemp, in



partnership with the Adrar Nouh Cooperative, presented the first model of a house made of bricks extracted from Indian hemp in the ISSAGUEN territorial community.

This trend towards building “hemp houses” in the region represents a new model for Morocco and the entire world. Due to its environmental sustainability and low cost. It is an initiative that could bring about a positive transformation in the construction sector, because of its essential role in preserving the environment.

Uses of hemp fibers in the rope and textile industry: In addition to making ropes, the uses of Indian hemp fibers can be developed and used in the manufacture of mats, fabric, bags, etc.

Uses of cannabis in the pharmaceutical industry: Indian cannabis is considered one of the oldest plants from which humans have extracted medicines. The Chinese used it to treat rheumatic pain and as an antiviral treatment (Marine, 2014). Cannabis was a sacred herb among the Indians, as it was considered part of the therapeutic substance of traditional Indian medicine, and it was used as a sedative, pain reliever, anxiety reliever, and antibacterial (Diane, 2016).

However, despite the decline in the medical use of the cannabis plant, the increasing interest in patients in the last two decades has given an opportunity to renew scientific interest in the medical use of the substances found in the cannabis plant.

In this context, France, through a specialized medical committee, diagnosed a group of diseases that may be treated with medical cannabis. These diseases include: anxiety disorders, such as post-traumatic stress disorder, depressive disorders, sleep disorders, chronic pain, neurological diseases and inflammatory bowel diseases. Some patients suffering from these diseases noticed improvement thanks to the use of medications containing cannabis (OEDT, 2018).

Generally, medications extracted from cannabis are aimed at combating anxiety, inflammation, lifestyle-related illnesses such as stress, back pain, fever, and even illnesses associated with anorexia. In addition, medical cannabis can help treat mental illnesses such as depression.

Overall, the need for new treatment options is indisputable, and it is reassuring to see that these medicines are extracted from the indigenous cannabis plant available in our country. This will contribute to the development of the pharmaceutical industry and provide self-sufficiency in medicines for some diseases. It will also contribute to production, allowing it to be exported to various countries, bring hard currency back to the country, and improve the standard of living of the people of Kif.

RESULTS

Through this article, we found that the factors for the expansion of kif culture in northern Morocco are represented by two main factors: the first factor represented by the

underdeveloped Spanish colonization, which did not develop the region, and the second factor represented by the fragility of natural resources, the reliefs, the harshness of the climate and the poor profitability of the land due to its poor quality. As a result, farmers had to look for economic alternatives capable of resisting the cruelty of nature.

The first constraint that hinders the new law relating to the legalization of cannabis is the authorization process, since authorization requires a certificate of land ownership, knowing that there are difficulties in the process of land ownership in these areas.

The legal approach is insufficient because it is a territorial project for an area with high demographic growth and fragile natural and economic characteristics.

Suggestions and requests from farmers were not taken into account during the development of the new law regarding the legalization of cannabis.

The law requires farmers to use hemp seeds imported from abroad, which means that local seeds will disappear, knowing that local seeds do not require much water in a mountainous region which suffers from a significant shortage of this vital substance.

Most of those interviewed agreed to legalize this cultivation, on the condition that legal proceedings against anyone wanted by the courts are canceled. They also favor the idea of creating alternatives such as: encouraging other crops compatible with the soil and climate of the mountainous region, such as figs, almond trees and vines. Encourage farmers by creating stables in which livestock are raised and fattened, establishing factories and laboratories that provide the population with income that guarantees the humanity and dignity of the local population.

Conclusion: In conclusion, this study demonstrates that the strategy of legalizing cannabis to curb illegal cultivation must be considered within a broader framework of regional rehabilitation and development. This involves not only legal changes but also the provision of necessary infrastructure and social amenities. The challenge of legalization is substantial, requiring time, financial resources, considerable effort, and the involvement of international markets and experts. For the farmers, legalization offers stability and alleviates economic and social insecurities. However, the critical question remains: Is mere regulation of cultivation sufficient to drive regional development and alleviate the hardships faced by farmers? In summary, while acknowledging the significance of legalizing cannabis for medicinal and industrial uses, it is imperative to expedite the implementation of this project. This should include finding immediate economic alternatives for the affected populations and effective strategies for regions where kif cultivation was previously banned, to prevent its resurgence. Future research and policy recommendations should focus on these aspects to ensure the holistic success of the legalization initiative.



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